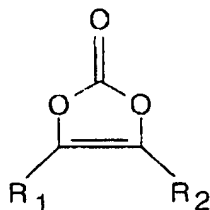


AMENDMENTS TO THE CLAIMS:

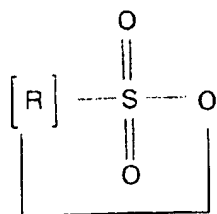
This listing of claims will replace all prior versions, and listing, of claims in the application:

1. (Original) A cathode for a battery, comprising a metal hydroxide having a specific surface area of $1 \text{ m}^2/\text{g}$ or more, as a cathode additive.
2. (Original) The cathode for a battery according to claim 1, wherein the specific surface area of the metal hydroxide is $2.5 \text{ m}^2/\text{g}$ or more.
3. (Original) The cathode for a battery according to claim 1, wherein the cathode for a battery comprises the metal hydroxide in the amount of greater than 0 wt% and less than 10 wt%.
4. (Original) The cathode for a battery according to claim 1, wherein the metal hydroxide is at least one compound selected from the group consisting of $\text{Al}(\text{OH})_3$, $\text{Mg}(\text{OH})_2$, $\text{Ca}(\text{OH})_2$, LiOH and NaOH .
5. (Currently Amended) A lithium ion battery comprising a cathode, an anode and a non-aqueous electrolyte, wherein the cathode is the cathode for a battery as defined in any one of claims 1 to 4 comprises a metal hydroxide having a specific surface area of $1 \text{ m}^2/\text{g}$ or more, as a cathode additive.
6. (Original) The lithium ion battery according to claim 5, wherein the electrolyte comprises at least one additive selected from the group consisting of the compounds represented by the following formula 1 to formula 4:

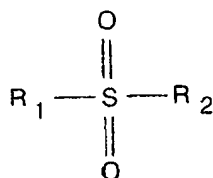
[formula 1]



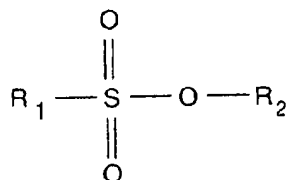
[formula 2]



[formula 3]



[formula 4]



wherein, each of R₁ and R₂ is independently selected from the group consisting of H, a C₁-C₅ alkenyl group, a C₁-C₅ alkyl group, a halogen atom, and a phenyl group and a phenoxy group non-substituted or substituted with a C₁-C₅ alkyl group or a halogen atom (formulae 1,3 and 4); and

R is a C₁-C₅ alkenyl group or a C₁-C₅ alkyl group (formula 2).

7. (Original) The lithium ion battery according to claim 6, wherein the compound represented by formula 1 is selected from the group consisting of VC (vinylene carbonate) and methyl esters, and the compound represented by any one of formula 2 to formula 4 is selected from the group consisting of propane sultone (PS), propene sultone, dimethyl sulfone, diphenyl sulfone, divinyl sulfone and methanesulfonic acid.

8. (New) The lithium ion battery according to claim 5, wherein the specific surface area of the metal hydroxide is 2.5 m²/g or more.

9. (New) The lithium ion battery according to claim 5, wherein the cathode for a battery comprises the metal hydroxide in the amount of greater than 0 wt% and less than 10 wt%.

10. (New) The lithium ion battery according to claim 5, wherein the metal hydroxide is at least one compound selected from the group consisting of $\text{Al}(\text{OH})_3$, $\text{Mg}(\text{OH})_2$, $\text{Ca}(\text{OH})_2$, LiOH and NaOH .